

PTO/SB/21 (02-04)

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<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	10/033,580	<b>RECEIVED</b> <b>CENTRAL FAX CENTER</b> <b>AUG 12 2004</b>
	Filing Date	December 28, 2001	
	First Named Inventor	Eddy	
	Art Unit	3832	
	Examiner Name	Marsh, Steven M.	
Total Number of Pages in This Submission	53	Attorney Docket Number	EDD002USPT01

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Michael S. Sherrill, #32,302
Signature	<i>M. Sherrill</i>
Date	12 Aug 2004

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Signature	<i>Sharon E. Bloomquist</i>	Date	August 12, 2004

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PTO/SB/17 (10-03)

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**FEE TRANSMITTAL**  
**for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 165.00

**Complete if Known**

Application Number	10/033,580
Filing Date	December 28, 2001
First Named Inventor	Eddy
Examiner Name	Marsh, Steven M.
Art Unit	3632
Attorney Docket No.	EDD002USPT01

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit  
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☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>			<b>(\$)</b>

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent	-20** =	X	
Multiple Dependent	-3** =	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
<b>SUBTOTAL (2)</b>		

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	165
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to Institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1808 180	1808 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$ 165**SUBMITTED BY**Name (Print/Type) **Michael S. Sherrill**

Signature

Registration No.

(Attorney/Agent)

32,302

(Complete if applicable)

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Date 12 Aug 04

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*Sharon E. Bloomquist*  
Sharon E. Bloomquist

OFFICIAL

<b>APPEAL BRIEF</b>			Docket No. <b>EDD002USPT01</b>
Serial No. <b>10/033,580</b>	Filing Date <b>December 28, 2001</b>	Examiner <b>Marsh, Steven M.</b>	Group Art Unit <b>3632</b>
Applicant:	<b>Eddy</b>		
Invention:	<b>EAVES TROUGH SUPPORT BRACKET</b>		

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
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Dear Sir:

This brief is filed on appeal from the decision of the Examiner dated March 25, 2004 finally rejecting claims 1, 3-16 and 18-22 in the above-referenced patent application.

This brief is being submitted in triplicate in accordance with 35 C.F.R. 1.192(a), along with the necessary filing fee as set forth in 35 C.F.R. 1.17(c).

**REAL PARTY IN INTEREST**

The real party in interest in connection with this appeal is the inventor Gary Eddy.

### RELATED APPEALS AND INTERFERENCES

Appellant and appellant's legal representative are unaware of any other appeal or interference which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

### STATUS OF CLAIMS

The application was filed on December 28, 2001 with claims 1-20. Claims 1, 18 and 19 were amended, claims 2 and 17 canceled and new claims 21 and 22 added in an Amendment and Response filed on December 19, 2002. Claims 1, 7, 13, 18 and 19 were amended in an Amendment and Response filed on August 26, 2003 concomitantly with the filing of a RCE. Claim 22 was amended in an Amendment and Response filed on December 12, 2003. Claims 1, 3-16 and 18-22 remain pending in the application. Claims 1, 3-16 and 18-22 have been finally rejected. No claims have been allowed.

The rejection of claims 1, 3-16 and 18-22 is appealed. A copy of the claims involved in this appeal is provided in the Appendix section of this Brief in accordance with 37 C.F.R. 1.192(c)(9).

### STATUS OF AMENDMENTS

No amendment has been filed subsequent to final rejection of the appealed claims.

### SUMMARY OF THE INVENTION

**A First Embodiment** of the present claimed invention (claims 1, 3-16, and 18-20) is directed to an eaves trough support bracket having a first leg extending in a second transverse direction from the first edge of a main beam with a proximal longitudinal end substantially transversely aligned with a proximal end of the main beam and a second leg extending in the second transverse direction from a second edge of the main beam with a proximal longitudinal

end substantially transversely aligned with the proximal end of the main beam. The main beam, first leg, and second leg define a concavity accessible from a first transverse direction whereby the support bracket is transversely nestable. A connection element extends in a first transverse direction from the distal end of the main beam with a longitudinally extending tab transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam.

**A Second Embodiment** of the present claimed invention (claim 21) is directed to an eaves trough support bracket having a main beam, first leg and second leg. The first and second legs extend in a second transverse direction. The first leg has a transverse height that tapers in the second transverse direction with a height at the longitudinal center of the main beam less than one half the transverse height at the proximal longitudinal end of the first leg. The second leg has a transverse height that tapers in the second transverse direction with a height at the longitudinal center of the main beam less than one half the transverse height at the proximal longitudinal end of the second leg.

**A Third Embodiment** of the present claimed invention (claim 22) is directed to an eaves trough support bracket having a main beam, connection element, first leg, second leg, a first bend line, second bend line, at least one primary rib, and at least one secondary rib. The connection element includes a strut and a tab. The at least one primary rib is formed within the main beam and the strut which extends across and substantially perpendicular to the first bend line and overlaps the first and second leg improving the strength of the bracket. The at least one secondary rib is formed within the strut and tab and extends across and substantially perpendicular to the second bend line and transversely overlaps the at least one primary rib improving the strength of the bracket.

#### ISSUES

1. Whether claim 22 is indefinite for failing to show overlapping of the primary rib and the legs.

2. Whether claims 1, 3-16 and 18-22 are obvious over Ramser (United States Patent No. 3,053,491) in view of Schwartz (United States Patent No. 3,041,033) in further view of Odekirk (United States Patent No. 4,294,422).

#### GROUPING OF CLAIMS

1. Rejected claims 1, 3-16 and 18-22 do NOT stand or fall together with respect to the obviousness rejection over Ramser in view of Schwartz in further view of Odekirk. The First Embodiment of the Invention (claims 1, 3-16 and 18-20) is directed to nestable eaves trough support brackets having a connection element on the distal end of the main beam with a longitudinally extending tab transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam. The Second Embodiment of the Invention (claim 21) is directed to eaves trough support brackets having first and second legs with transverse heights that taper in the second transverse direction, with a transverse height of each leg at the longitudinal center of the main beam which is less than one half the transverse height of that leg at the proximal longitudinal end of the leg. The Third Embodiment of the Invention (claim 22) is directed to eaves trough support brackets having a primary rib which overlaps the legs.

#### ARGUMENT

##### *Objections/Rejections Under 35 U.S.C. § 112*

*1.0 The Examiner has objected to claim 22 as indefinite for failing to show overlapping of the primary rib and the legs.*

Applicant respectfully disagrees that claim 22 is indefinite. Claim 22 recites "at least one primary rib formed within the main beam and the strut which ... (ii) *longitudinally* overlaps the first leg and the second leg ..." (Emphasis Added). Figures 1-4 and 5 support this claimed element. Referring to Figure 2, the rib (131) clearly longitudinally overlaps the first leg (110) as the rib (131) has a longitudinal length that starts proximate the strut (40) and the distal longitudinal end (112) of the first leg (110) and runs in the second longitudinal direction ( $x^2$ )

toward the proximal longitudinal end (111) of the first leg (110). Hence, the rib longitudinally overlaps the first leg.

***Objections/Rejections***  
**Under 35 U.S.C. §103**

**2.0** *The Examiner has rejected claims 1, 3-16 and 18-22 as obvious over Ramser (United States Patent No. 3,053,491) in view of Schwartz (United States Patent No. 3,041,033) in further view of Odekirk (United States Patent No. 4,294,422).*

**SUMMARY OF CITED REFERENCES**

**Ramser** discloses an eaves trough support bracket comprising a main beam, first leg, and second leg. The lower portions of the first and second legs are bent inward along a longitudinal bend line so as to form a nearly enclosed base on the bracket. The first and second legs also extend in the second transverse direction with the transverse height of the legs remaining substantially unchanged along the longitudinal length of the bracket.

**Schwartz** discloses a shelving bracket comprising a main beam, first leg, and second leg. The main beam, first leg, and second leg define a concavity accessible from a first transverse direction.

**Odekirk** discloses an eaves trough support bracket comprising a main beam, a first longitudinally elongated side rib, second longitudinally elongated side rib, and connection element. The connection element has a strut and tab. A rib is also disclosed along a bend line along the transition line from the main beam to the strut. The first and second side ribs extend in the second transverse direction with the transverse height of the side ribs remaining substantially unchanged along the longitudinal length of the bracket.

**LEGAL BASIS**

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation; either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to

combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, NOT in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). See, M.P.E.P. § 2143.

As to the first criteria, it is necessary to ascertain whether or not the reference motivates one of ordinary skill in the relevant art, having the reference before him, to make the proposed substitution, combination, or modification. In re Linter, 458 F.2d 1013, 173 U.S.P.Q. 560, 562 (CCPA 1972). Obviousness can only be established where there is some teaching, suggestion or motivation in the prior art or in the knowledge generally available to one of ordinary skill in the art, to combine the references and produce the claimed invention. In re Fine, 837 F.2d 1071, 5 U.S.P.Q. 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). See, M.P.E.P. § 2143.01.

#### FIRST EMBODIMENT

Ramser, Schwartz and Odekirk do NOT provide the requisite motivation to modify the eaves trough bracket of Ramser to have (i) an open base as disclosed in Schwartz, nor (ii) a connection element on the distal end of the main beam with a longitudinally extending tab transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam.

#### Open Base

While Schwartz discloses a bracket with an open base, the bracket is for shelving and the written description indicates the open base is used for positioning the bracket over wall studs. Neither Schwartz nor Odekirk disclose a bracket that is nestable. Persons skilled in the art would NOT normally look to shelving bracket technology to design an eaves trough gutter bracket. Due to the highly divergent uses of the Ramser invention relative to the Schwartz and Odekirk inventions,



persons skilled in the art would NOT be motivated to combine the teachings of these references. It is only through the use of forbidden hindsight that a motivation is found to combine these references.

Upwardly Spaced Connection Element Tab

The First Embodiment of the Present Claimed Invention is configured and arranged with a "return tab" on the connection element which is transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam. Such spacing of the return tab from the main beam positions the main beam a distance into the gutter effective for hiding the main beam from ground level view even when the gutter begins to sag. It is well known within the industry that the curbside appeal of a home is substantially diminished if the gutter brackets are visible from ground level. The First Embodiment of the Present Claimed Invention significantly reduces the likelihood that the brackets will become visible from ground level even if the gutter begins to sag.

Ramser discloses a gutter bracket with a connection element on the distal end of the bracket for engaging a lip [5] on the upper edge of the front wall of the gutter [4]. The connection element is a hook [11] with a longitudinally extending return portion which is transversely spaced from the main beam a distance barely sufficient to accommodate passage of the lip [5] on the gutter between the horizontal web [7] of the bracket and the return portion of the hook [11] (e.g., about 0.1 to 0.2 inches). See, FIG. 3. Ramser minimizes the transverse height of the gap formed by the hook [11] as the forward end of the bracket (i.e., the forward ends of the horizontal web [7] and the vertical sides [8]) must fit snugly against the front wall of the gutter [4] in order to prevent the bracket from damaging the gutter when the fastener [20] is driven into the rear wall of the gutter [1]. See, FIG 4. Accordingly, Ramser does not disclose, teach or suggest a connection element on the distal end of the main beam wherein the "return tab" is transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam.

Schwartz is not directed to a gutter bracket and therefore does not provide as "return tab".

Odekirk discloses a gutter bracket with a main beam having a portion which extends well above the "return tab" on the connection element.

#### SECOND EMBODIMENT

Ramser, Schwartz and Odekirk do NOT provide the requisite motivation to modify the eaves trough bracket of Ramser to have a first and second leg that have transverse heights that taper in the second transverse direction with a transverse height at the longitudinal center of the main beam of less than one half the transverse height at the proximal longitudinal end of the second leg. Odekirk discloses a gutter bracket with legs with a uniform transverse height along the entire length of the main beam. While Schwartz discloses a bracket with tapering legs, the bracket is for shelving and does not disclose a required ratio of the taper. Persons skilled in the art would NOT normally look to shelving bracket technology to design an eaves trough gutter bracket. Due to the highly divergent uses of the Ramser and Schwartz devices, persons skilled in the art would NOT be motivated to combine the teachings of these references. It is only through the use of forbidden hindsight that a motivation is found to combine these references.

#### THIRD EMBODIMENT

The Third Embodiment of the present claimed invention is directed to a bracket with a primary rib which overlaps the legs.

Ramser discloses an eaves trough support bracket comprising a main beam and a connection element. The Ramser bracket has no ribs. Accordingly, the Ramser bracket does not disclose, teach or suggest a primary rib which overlaps the legs.

Schwartz discloses a shelving bracket comprising a main beam and two legs. The Schwartz bracket has no ribs. Accordingly, the Schwartz bracket does not disclose, teach or suggest a primary rib which overlaps the legs.

Odekirk discloses an eaves trough support bracket. The Odekirk bracket comprises a main beam [20] and connection element [60]. The connection element [60] has a strut [62] and tab [64] with a rib [unnumbered] formed along the bend line [unnumbered] between the main beam [20] and the strut [62]. Odekirk does not disclose sides on the support bracket, but does disclose side ribs [22] which extend along the longitudinal length of the main beam [20]. However, as seen clearly in FIG 1, the rib [unnumbered] which extends across the bend line [unnumbered] does not longitudinally overlap the side ribs [22].

### CONCLUSION

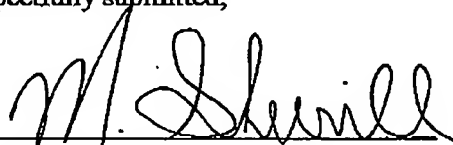
Applicant respectfully submits that all pending claims (claims 1, 3-16 and 18-22) are in condition for allowance.

Respectfully submitted,

Date

12 Aug 04

By



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**APPENDIX****PENDING CLAIMS**

*United States Patent Application  
Serial No. 10/033,580*

1. An eaves trough support bracket, comprising:
  - (a) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces;
  - (b) a connection element extending in a first transverse direction from the distal end of the main beam and having a longitudinally extending tab transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam;
  - (c) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction;
  - (d) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam; and
  - (e) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam.
  - (f) wherein the main beam, first leg and second leg define a concavity accessible from the first transverse direction whereby the support bracket is transversely nestable.
3. The bracket of claim 1 comprising a laterally extending first bend line along a transition line from the main beam to the connection element.
4. The bracket of claim 3 further comprising at least one rib formed within the main beam and the connection element which extends across and substantially perpendicular to the first bend

line, whereby the longitudinal structural strength of the bracket along the first bend line is improved.

5. The bracket of claim 1 comprising a laterally extending second bend line along a transition line from the main beam to the hook.

6. The bracket of claim 5 further comprising at least one rib formed within the main beam and the hook which extends across and substantially perpendicular to the second bend line, whereby the longitudinal structural strength of the bracket along the second bend line is improved.

7. The bracket of claim 1 wherein the connection element includes (i) a strut with a first transverse end connected to the distal end of the main beam and a second transverse end extending in a first transverse direction from the distal end of the main beam, and (ii) the tab with a first longitudinal end connected to the second transverse end of the strut and a second transverse end extending in a second longitudinal direction from the second transverse end of the strut.

8. The bracket of claim 7 comprising a laterally extending third bend line along a transition line from the strut to the tab.

9. The bracket of claim 8 further comprising at least one rib formed within the strut and the tab which extends across and substantially perpendicular to the third bend line, whereby the longitudinal structural strength of the bracket along the third bend line is improved.

10. The bracket of claim 1 wherein the hook includes (i) a transversely extending shaft portion with a first end connected to the proximal end of the main beam and a second end extending in the first transverse direction from the proximal end of the main beam, (ii) a hooking portion with a first end connected to the second end of the shaft and a second end extending away from the distal end of the main beam in a second longitudinal direction from the second end of the shaft, and (iii) a transversely extending extension portion with a first end connected to the

second end of the hooking portion and a second end extending in the second transverse direction from the second end of the hooking portion.

11. The bracket of claim 1 further comprising a longitudinally extending fourth bend line along a transition line from the main beam to the first leg.

12. The bracket of claim 11 further comprising a longitudinally extending fifth bend line along a transition line from the main beam to the second leg.

13. The bracket of claim 10 further comprising a longitudinally aligned hole through each of the shaft and extension portions of the hook effective for accommodating partial passage of a mechanical fastener through the holes.

14. The bracket of claim 1 wherein the proximal longitudinal ends of the first and second legs independently have a transverse height of about 0.5 to 1.5 inches.

15. The bracket of claim 12 wherein (i) the fourth and fifth bend lines each have a distal longitudinal end proximate the distal end of the main beam, and (ii) at least one rib which extends across and is substantially perpendicular to the first bend line extends beyond the distal longitudinal ends of the fourth and fifth bend lines in the second transverse direction.

16. The bracket of claim 1 wherein the bracket is formed from a single unitary piece of metal.

18. An article of commerce, comprising:

- (a) a length of eaves trough; and
- (b) a plurality of eaves trough support brackets comprising:
  - (i) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces,
  - (ii) a connection element extending in a first transverse direction from the distal end of the main beam and having a longitudinally extending tab

- transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam,
- (iii) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction,
  - (iv) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and
  - (v) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam.
  - (vi) wherein the main beam, first leg and second leg define a concavity accessible from the first transverse direction whereby the support bracket is transversely nestable.

19. A method of installing eaves trough, comprising the steps of:

- (a) obtaining a length of eaves trough defining a water diversion channel and comprising:
  - (i) a bottom having longitudinally spaced and laterally extending first and second edges,
  - (ii) a back wall transversely extending from the second laterally extending edge of the bottom and having a laterally extending distal edge transversely spaced from the bottom in a primary transverse direction,
  - (iii) a front wall transversely extending from the first laterally extending edge of the bottom and having a laterally extending distal edge transversely spaced from the bottom in the primary transverse direction, and
  - (iv) a laterally extending snap-lock channel formed along the distal edge of the front wall
- (b) obtaining a plurality of eaves trough support brackets comprising:

- (i) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces,
  - (ii) a connection element extending in a first transverse direction from the distal end of the main beam configured and arranged with a longitudinally extending tab transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam for releasable engagement within the snap-lock channel formed in the eaves trough,
  - (iii) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction,
  - (iv) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and
  - (v) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam,
  - (vi) wherein the main beam, first leg and second leg define a concavity accessible from the first transverse direction whereby the support bracket is transversely nestable;
- (c) engaging the connection element of the support bracket within the snap-lock channel formed in the eaves trough;
  - (d) sliding the distal edge of the rear wall of the eaves trough into the concavity defined by the hook to form a connected eaves trough assembly;
  - (e) positioning the connected eaves trough assembly along an eave with the back wall of the eaves trough engaging the eave; and
  - (f) securing the connected eaves trough assembly to the eave by longitudinally driving a mechanical fastener through the hook of the bracket and the rear wall of the eaves trough, and into connective engagement with the eave.



20. The method of claim 19 wherein the mechanical fastener passes through a hole in the hook and the hole is vertically positioned above the distal edge of the front wall of the eaves trough after installation of the eaves trough assembly such that water retained within the water diversion channel defined by the eaves trough will spill over the distal edge of the front wall of the eaves trough before contacting the hole in the hook.

21. An eaves trough support bracket, comprising:

- (a) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces;
- (b) a connection element extending in a first transverse direction from the distal end of the main beam;
- (c) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction;
- (d) a first leg (i) extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and (ii) having a transverse height that tapers in the second transverse direction with a transverse height at the longitudinal center of the main beam of less than one half the transverse height at the proximal longitudinal end of the first leg; and
- (e) a second leg (i) extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and (ii) having a transverse height that tapers in the second transverse direction with a transverse height at the longitudinal center of the main beam of less than one half the transverse height at the proximal longitudinal end of the second leg.

22. An eaves trough support bracket, comprising:

- (a) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces;

- (b) a connection element integrally formed with and extending in a first transverse direction from the distal end of the main beam wherein the connection element includes (i) a strut with a first transverse end connected to the distal end of the main beam and a second transverse end extending in a first transverse direction from the distal end of the main beam, and (ii) a tab with a first longitudinal end connected to the second transverse end of the strut and a second transverse end extending in a second longitudinal direction from the second transverse end of the strut;
- (c) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction;
- (d) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam;
- (e) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam;
- (f) a laterally extending first bend line along a transition line from the main beam to the strut;
- (g) at least one primary rib formed within the main beam and the strut which (i) extends across and substantially perpendicular to the first bend line, whereby the structural strength of the bracket along the first bend line is improved, and (ii) is latitudinally offset and longitudinally overlaps the first leg and the second leg, whereby the structural strength of the bracket along the first bend line is improved;
- (h) a laterally extending second bend line along a transition line from the strut to the tab; and
- (i) at least one secondary rib formed within the strut and the tab which (i) extends across and substantially perpendicular to the second bend line, whereby the structural strength of the bracket along the second bend line is improved, and (ii)

transversely overlaps the at least one primary rib whereby the strength of the bracket along the strut is improved.

## CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office on August 12, 2004.

*Sharon E. Bloomquist*  
Sharon E. Bloomquist

<b>APPEAL BRIEF</b>			Docket No. <b>EDD002USPT01</b>
Serial No. <b>10/033,580</b>	Filing Date <b>December 28, 2001</b>	Examiner <b>Marsh, Steven M.</b>	Group Art Unit <b>3632</b>
Applicant:	<b>Eddy</b>		
Invention:	<b>EAVES TROUGH SUPPORT BRACKET</b>		

**Mail Stop Appeal Brief - Patents**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This brief is filed on appeal from the decision of the Examiner dated March 25, 2004 finally rejecting claims 1, 3-16 and 18-22 in the above-referenced patent application.

This brief is being submitted in triplicate in accordance with 35 C.F.R. 1.192(a), along with the necessary filing fee as set forth in 35 C.F.R. 1.17(c).

**REAL PARTY IN INTEREST**

The real party in interest in connection with this appeal is the inventor Gary Eddy.

### RELATED APPEALS AND INTERFERENCES

Appellant and appellant's legal representative are unaware of any other appeal or interference which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

### STATUS OF CLAIMS

The application was filed on December 28, 2001 with claims 1-20. Claims 1, 18 and 19 were amended, claims 2 and 17 canceled and new claims 21 and 22 added in an Amendment and Response filed on December 19, 2002. Claims 1, 7, 13, 18 and 19 were amended in an Amendment and Response filed on August 26, 2003 concomitantly with the filing of a RCE. Claim 22 was amended in an Amendment and Response filed on December 12, 2003. Claims 1, 3-16 and 18-22 remain pending in the application. Claims 1, 3-16 and 18-22 have been finally rejected. No claims have been allowed.

The rejection of claims 1, 3-16 and 18-22 is appealed. A copy of the claims involved in this appeal is provided in the Appendix section of this Brief in accordance with 37 C.F.R. 1.192(c)(9).

### STATUS OF AMENDMENTS

No amendment has been filed subsequent to final rejection of the appealed claims.

### SUMMARY OF THE INVENTION

A First Embodiment of the present claimed invention (claims 1, 3-16, and 18-20) is directed to an eaves trough support bracket having a first leg extending in a second transverse direction from the first edge of a main beam with a proximal longitudinal end substantially transversely aligned with a proximal end of the main beam and a second leg extending in the second transverse direction from a second edge of the main beam with a proximal longitudinal

end substantially transversely aligned with the proximal end of the main beam. The main beam, first leg, and second leg define a concavity accessible from a first transverse direction whereby the support bracket is transversely nestable. A connection element extends in a first transverse direction from the distal end of the main beam with a longitudinally extending tab transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam.

A **Second Embodiment** of the present claimed invention (claim 21) is directed to an eaves trough support bracket having a main beam, first leg and second leg. The first and second legs extend in a second transverse direction. The first leg has a transverse height that tapers in the second transverse direction with a height at the longitudinal center of the main beam less than one half the transverse height at the proximal longitudinal end of the first leg. The second leg has a transverse height that tapers in the second transverse direction with a height at the longitudinal center of the main beam less than one half the transverse height at the proximal longitudinal end of the second leg.

A **Third Embodiment** of the present claimed invention (claim 22) is directed to an eaves trough support bracket having a main beam, connection element, first leg, second leg, a first bend line, second bend line, at least one primary rib, and at least one secondary rib. The connection element includes a strut and a tab. The at least one primary rib is formed within the main beam and the strut which extends across and substantially perpendicular to the first bend line and overlaps the first and second leg improving the strength of the bracket. The at least one secondary rib is formed within the strut and tab and extends across and substantially perpendicular to the second bend line and transversely overlaps the at least one primary rib improving the strength of the bracket.

#### ISSUES

1. Whether claim 22 is indefinite for failing to show overlapping of the primary rib and the legs.

2. Whether claims 1, 3-16 and 18-22 are obvious over Ramser (United States Patent No. 3,053,491) in view of Schwartz (United States Patent No. 3,041,033) in further view of Odekirk (United States Patent No. 4,294,422).

#### GROUPING OF CLAIMS

1. Rejected claims 1, 3-16 and 18-22 do NOT stand or fall together with respect to the obviousness rejection over Ramser in view of Schwartz in further view of Odekirk. The First Embodiment of the Invention (claims 1, 3-16 and 18-20) is directed to nestable eaves trough support brackets having a connection element on the distal end of the main beam with a longitudinally extending tab transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam. The Second Embodiment of the Invention (claim 21) is directed to eaves trough support brackets having first and second legs with transverse heights that taper in the second transverse direction, with a transverse height of each leg at the longitudinal center of the main beam which is less than one half the transverse height of that leg at the proximal longitudinal end of the leg. The Third Embodiment of the Invention (claim 22) is directed to eaves trough support brackets having a primary rib which overlaps the legs.

#### ARGUMENT

##### *Objections/Rejections Under 35 U.S.C. § 112*

*1.0 The Examiner has objected to claim 22 as indefinite for failing to show overlapping of the primary rib and the legs.*

Applicant respectfully disagrees that claim 22 is indefinite. Claim 22 recites "at least one primary rib formed within the main beam and the strut which ... (ii) *longitudinally* overlaps the first leg and the second leg ..." (Emphasis Added). Figures 1-4 and 5 support this claimed element. Referring to Figure 2, the rib (131) clearly longitudinally overlaps the first leg (110) as the rib (131) has a longitudinal length that starts proximate the strut (40) and the distal longitudinal end (112) of the first leg (110) and runs in the second longitudinal direction ( $x^2$ )

toward the proximal longitudinal end (111) of the first leg (110). Hence, the rib longitudinally overlaps the first leg.

***Objections/Rejections***  
**Under 35 U.S.C. §103**

*2.0 The Examiner has rejected claims 1, 3-16 and 18-22 as obvious over Ramser (United States Patent No. 3,053,491) in view of Schwartz (United States Patent No. 3,041,033) in further view of Odekirk (United States Patent No. 4,294,422).*

**SUMMARY OF CITED REFERENCES**

**Ramser** discloses an eaves trough support bracket comprising a main beam, first leg, and second leg. The lower portions of the first and second legs are bent inward along a longitudinal bend line so as to form a nearly enclosed base on the bracket. The first and second legs also extend in the second transverse direction with the transverse height of the legs remaining substantially unchanged along the longitudinal length of the bracket.

**Schwartz** discloses a shelving bracket comprising a main beam, first leg, and second leg. The main beam, first leg, and second leg define a concavity accessible from a first transverse direction.

**Odekirk** discloses an eaves trough support bracket comprising a main beam, a first longitudinally elongated side rib, second longitudinally elongated side rib, and connection element. The connection element has a strut and tab. A rib is also disclosed along a bend line along the transition line from the main beam to the strut. The first and second side ribs extend in the second transverse direction with the transverse height of the side ribs remaining substantially unchanged along the longitudinal length of the bracket.

**LEGAL BASIS**

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation; either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to



combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, NOT in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). See, M.P.E.P. § 2143.

As to the first criteria, it is necessary to ascertain whether or not the reference motivates one of ordinary skill in the relevant art, having the reference before him, to make the proposed substitution, combination, or modification. In re Linter, 458 F.2d 1013, 173 U.S.P.Q. 560, 562 (CCPA 1972). Obviousness can only be established where there is some teaching, suggestion or motivation in the prior art or in the knowledge generally available to one of ordinary skill in the art, to combine the references and produce the claimed invention. In re Fine, 837 F.2d 1071, 5 U.S.P.Q. 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). See, M.P.E.P. § 2143.01.

#### FIRST EMBODIMENT

Ramser, Schwartz and Odekirk do NOT provide the requisite motivation to modify the eaves trough bracket of Ramser to have (i) an open base as disclosed in Schwartz, nor (ii) a connection element on the distal end of the main beam with a longitudinally extending tab transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam.

#### Open Base

While Schwartz discloses a bracket with an open base, the bracket is for shelving and the written description indicates the open base is used for positioning the bracket over wall studs. Neither Schwartz nor Odekirk disclose a bracket that is nestable. Persons skilled in the art would NOT normally look to shelving bracket technology to design an eaves trough gutter bracket. Due to the highly divergent uses of the Ramser invention relative to the Schwartz and Odekirk inventions,

persons skilled in the art would NOT be motivated to combine the teachings of these references. It is only through the use of forbidden hindsight that a motivation is found to combine these references.

#### Upwardly Spaced Connection Element Tab

The First Embodiment of the Present Claimed Invention is configured and arranged with a "return tab" on the connection element which is transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam. Such spacing of the return tab from the main beam positions the main beam a distance into the gutter effective for hiding the main beam from ground level view even when the gutter begins to sag. It is well known within the industry that the curbside appeal of a home is substantially diminished if the gutter brackets are visible from ground level. The First Embodiment of the Present Claimed Invention significantly reduces the likelihood that the brackets will become visible from ground level even if the gutter begins to sag.

Ramser discloses a gutter bracket with a connection element on the distal end of the bracket for engaging a lip [5] on the upper edge of the front wall of the gutter [4]. The connection element is a hook [11] with a longitudinally extending return portion which is transversely spaced from the main beam a distance barely sufficient to accommodate passage of the lip [5] on the gutter between the horizontal web [7] of the bracket and the return portion of the hook [11] (e.g., about 0.1 to 0.2 inches). See, FIG. 3. Ramser minimizes the transverse height of the gap formed by the hook [11] as the forward end of the bracket (i.e., the forward ends of the horizontal web [7] and the vertical sides [8]) must fit snugly against the front wall of the gutter [4] in order to prevent the bracket from damaging the gutter when the fastener [20] is driven into the rear wall of the gutter [1]. See, FIG 4. Accordingly, Ramser does not disclose, teach or suggest a connection element on the distal end of the main beam wherein the "return tab" is transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam.

Schwartz is not directed to a gutter bracket and therefore does not provide as "return tab".

Odekirk discloses a gutter bracket with a main beam having a portion which extends well above the "return tab" on the connection element.

#### SECOND EMBODIMENT

Ramser, Schwartz and Odekirk do NOT provide the requisite motivation to modify the eaves trough bracket of Ramser to have a first and second leg that have transverse heights that taper in the second transverse direction with a transverse height at the longitudinal center of the main beam of less than one half the transverse height at the proximal longitudinal end of the second leg. Odekirk discloses a gutter bracket with legs with a uniform transverse height along the entire length of the main beam. While Schwartz discloses a bracket with tapering legs, the bracket is for shelving and does not disclose a required ratio of the taper. Persons skilled in the art would NOT normally look to shelving bracket technology to design an eaves trough gutter bracket. Due to the highly divergent uses of the Ramser and Schwartz devices, persons skilled in the art would NOT be motivated to combine the teachings of these references. It is only through the use of forbidden hindsight that a motivation is found to combine these references.

#### THIRD EMBODIMENT

The Third Embodiment of the present claimed invention is directed to a bracket with a primary rib which overlaps the legs.

Ramser discloses an eaves trough support bracket comprising a main beam and a connection element. The Ramser bracket has no ribs. Accordingly, the Ramser bracket does not disclose, teach or suggest a primary rib which overlaps the legs.

Schwartz discloses a shelving bracket comprising a main beam and two legs. The Schwartz bracket has no ribs. Accordingly, the Schwartz bracket does not disclose, teach or suggest a primary rib which overlaps the legs.

Odekirk discloses an eaves trough support bracket. The Odekirk bracket comprises a main beam [20] and connection element [60]. The connection element [60] has a strut [62] and tab [64] with a rib [unnumbered] formed along the bend line [unnumbered] between the main beam [20] and the strut [62]. Odekirk does not disclose sides on the support bracket, but does disclose side ribs [22] which extend along the longitudinal length of the main beam [20]. However, as seen clearly in FIG 1, the rib [unnumbered] which extends across the bend line [unnumbered] does not longitudinally overlap the side ribs [22].

### CONCLUSION

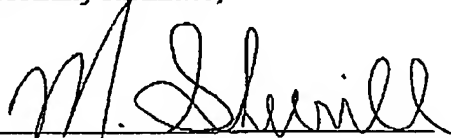
Applicant respectfully submits that all pending claims (claims 1, 3-16 and 18-22) are in condition for allowance.

Respectfully submitted,

Date

12 Aug 04

By



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## APPENDIX

## PENDING CLAIMS

*United States Patent Application*  
*Serial No. 10/033,580*

1. An eaves trough support bracket, comprising:
  - (a) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces;
  - (b) a connection element extending in a first transverse direction from the distal end of the main beam and having a longitudinally extending tab transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam;
  - (c) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction;
  - (d) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam; and
  - (e) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam.
  - (f) wherein the main beam, first leg and second leg define a concavity accessible from the first transverse direction whereby the support bracket is transversely nestable.
3. The bracket of claim 1 comprising a laterally extending first bend line along a transition line from the main beam to the connection element.
4. The bracket of claim 3 further comprising at least one rib formed within the main beam and the connection element which extends across and substantially perpendicular to the first bend

line, whereby the longitudinal structural strength of the bracket along the first bend line is improved.

5. The bracket of claim 1 comprising a laterally extending second bend line along a transition line from the main beam to the hook.

6. The bracket of claim 5 further comprising at least one rib formed within the main beam and the hook which extends across and substantially perpendicular to the second bend line, whereby the longitudinal structural strength of the bracket along the second bend line is improved.

7. The bracket of claim 1 wherein the connection element includes (i) a strut with a first transverse end connected to the distal end of the main beam and a second transverse end extending in a first transverse direction from the distal end of the main beam, and (ii) the tab with a first longitudinal end connected to the second transverse end of the strut and a second transverse end extending in a second longitudinal direction from the second transverse end of the strut.

8. The bracket of claim 7 comprising a laterally extending third bend line along a transition line from the strut to the tab.

9. The bracket of claim 8 further comprising at least one rib formed within the strut and the tab which extends across and substantially perpendicular to the third bend line, whereby the longitudinal structural strength of the bracket along the third bend line is improved.

10. The bracket of claim 1 wherein the hook includes (i) a transversely extending shaft portion with a first end connected to the proximal end of the main beam and a second end extending in the first transverse direction from the proximal end of the main beam, (ii) a hooking portion with a first end connected to the second end of the shaft and a second end extending away from the distal end of the main beam in a second longitudinal direction from the second end of the shaft, and (iii) a transversely extending extension portion with a first end connected to the

second end of the hooking portion and a second end extending in the second transverse direction from the second end of the hooking portion.

11. The bracket of claim 1 further comprising a longitudinally extending fourth bend line along a transition line from the main beam to the first leg.

12. The bracket of claim 11 further comprising a longitudinally extending fifth bend line along a transition line from the main beam to the second leg.

13. The bracket of claim 10 further comprising a longitudinally aligned hole through each of the shaft and extension portions of the hook effective for accommodating partial passage of a mechanical fastener through the holes.

14. The bracket of claim 1 wherein the proximal longitudinal ends of the first and second legs independently have a transverse height of about 0.5 to 1.5 inches.

15. The bracket of claim 12 wherein (i) the fourth and fifth bend lines each have a distal longitudinal end proximate the distal end of the main beam, and (ii) at least one rib which extends across and is substantially perpendicular to the first bend line extends beyond the distal longitudinal ends of the fourth and fifth bend lines in the second transverse direction.

16. The bracket of claim 1 wherein the bracket is formed from a single unitary piece of metal.

18. An article of commerce, comprising:

(a) a length of eaves trough; and

(b) a plurality of eaves trough support brackets comprising:

(i) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces,

(ii) a connection element extending in a first transverse direction from the distal end of the main beam and having a longitudinally extending tab.

- transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam,
- (iii) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction,
- (iv) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and
- (v) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam.
- (vi) wherein the main beam, first leg and second leg define a concavity accessible from the first transverse direction whereby the support bracket is transversely nestable.

19. A method of installing eaves trough, comprising the steps of:

- (a) obtaining a length of eaves trough defining a water diversion channel and comprising:
  - (i) a bottom having longitudinally spaced and laterally extending first and second edges,
  - (ii) a back wall transversely extending from the second laterally extending edge of the bottom and having a laterally extending distal edge transversely spaced from the bottom in a primary transverse direction,
  - (iii) a front wall transversely extending from the first laterally extending edge of the bottom and having a laterally extending distal edge transversely spaced from the bottom in the primary transverse direction, and
  - (iv) a laterally extending snap-lock channel formed along the distal edge of the front wall
- (b) obtaining a plurality of eaves trough support brackets comprising:



- (i) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces,
- (ii) a connection element extending in a first transverse direction from the distal end of the main beam configured and arranged with a longitudinally extending tab transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam for releasable engagement within the snap-lock channel formed in the eaves trough,
- (iii) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction,
- (iv) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and
- (v) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam,
- (vi) wherein the main beam, first leg and second leg define a concavity accessible from the first transverse direction whereby the support bracket is transversely nestable;
- (c) engaging the connection element of the support bracket within the snap-lock channel formed in the eaves trough;
- (d) sliding the distal edge of the rear wall of the eaves trough into the concavity defined by the hook to form a connected eaves trough assembly;
- (e) positioning the connected eaves trough assembly along an eave with the back wall of the eaves trough engaging the eave; and
- (f) securing the connected eaves trough assembly to the eave by longitudinally driving a mechanical fastener through the hook of the bracket and the rear wall of the eaves trough, and into connective engagement with the eave.

20. The method of claim 19 wherein the mechanical fastener passes through a hole in the hook and the hole is vertically positioned above the distal edge of the front wall of the eaves trough after installation of the eaves trough assembly such that water retained within the water diversion channel defined by the eaves trough will spill over the distal edge of the front wall of the eaves trough before contacting the hole in the hook.

21. An eaves trough support bracket, comprising:

- (a) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces;
- (b) a connection element extending in a first transverse direction from the distal end of the main beam;
- (c) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction;
- (d) a first leg (i) extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and (ii) having a transverse height that tapers in the second transverse direction with a transverse height at the longitudinal center of the main beam of less than one half the transverse height at the proximal longitudinal end of the first leg; and
- (e) a second leg (i) extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and (ii) having a transverse height that tapers in the second transverse direction with a transverse height at the longitudinal center of the main beam of less than one half the transverse height at the proximal longitudinal end of the second leg.

22. An eaves trough support bracket, comprising:

- (a) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces;

- (b) a connection element integrally formed with and extending in a first transverse direction from the distal end of the main beam wherein the connection element includes (i) a strut with a first transverse end connected to the distal end of the main beam and a second transverse end extending in a first transverse direction from the distal end of the main beam, and (ii) a tab with a first longitudinal end connected to the second transverse end of the strut and a second transverse end extending in a second longitudinal direction from the second transverse end of the strut;
- (c) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction;
- (d) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam;
- (e) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam;
- (f) a laterally extending first bend line along a transition line from the main beam to the strut;
- (g) at least one primary rib formed within the main beam and the strut which (i) extends across and substantially perpendicular to the first bend line, whereby the structural strength of the bracket along the first bend line is improved, and (ii) is latitudinally offset and longitudinally overlaps the first leg and the second leg, whereby the structural strength of the bracket along the first bend line is improved;
- (h) a laterally extending second bend line along a transition line from the strut to the tab; and
- (i) at least one secondary rib formed within the strut and the tab which (i) extends across and substantially perpendicular to the second bend line, whereby the structural strength of the bracket along the second bend line is improved, and (ii)

transversely overlaps the at least one primary rib whereby the strength of the bracket along the strut is improved.

## CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office on August 12, 2004.

*Sharon E. Bloomquist*  
Sharon E. Bloomquist

<b>APPEAL BRIEF</b>			Docket No. <b>EDD002USPT01</b>
Serial No. <b>10/033,580</b>	Filing Date <b>December 28, 2001</b>	Examiner <b>Marsh, Steven M.</b>	Group Art Unit <b>3632</b>
Applicant:	<b>Eddy</b>		
Invention:	<b>EAVES TROUGH SUPPORT BRACKET</b>		

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This brief is filed on appeal from the decision of the Examiner dated March 25, 2004 finally rejecting claims 1, 3-16 and 18-22 in the above-referenced patent application.

This brief is being submitted in triplicate in accordance with 35 C.F.R. 1.192(a), along with the necessary filing fee as set forth in 35 C.F.R. 1.17(c).

**REAL PARTY IN INTEREST**

The real party in interest in connection with this appeal is the inventor Gary Eddy.

### RELATED APPEALS AND INTERFERENCES

Appellant and appellant's legal representative are unaware of any other appeal or interference which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

### STATUS OF CLAIMS

The application was filed on December 28, 2001 with claims 1-20. Claims 1, 18 and 19 were amended, claims 2 and 17 canceled and new claims 21 and 22 added in an Amendment and Response filed on December 19, 2002. Claims 1, 7, 13, 18 and 19 were amended in an Amendment and Response filed on August 26, 2003 concomitantly with the filing of a RCE. Claim 22 was amended in an Amendment and Response filed on December 12, 2003. Claims 1, 3-16 and 18-22 remain pending in the application. Claims 1, 3-16 and 18-22 have been finally rejected. No claims have been allowed.

The rejection of claims 1, 3-16 and 18-22 is appealed. A copy of the claims involved in this appeal is provided in the Appendix section of this Brief in accordance with 37 C.F.R. 1.192(c)(9).

### STATUS OF AMENDMENTS

No amendment has been filed subsequent to final rejection of the appealed claims.

### SUMMARY OF THE INVENTION

A First Embodiment of the present claimed invention (claims 1, 3-16, and 18-20) is directed to an eaves trough support bracket having a first leg extending in a second transverse direction from the first edge of a main beam with a proximal longitudinal end substantially transversely aligned with a proximal end of the main beam and a second leg extending in the second transverse direction from a second edge of the main beam with a proximal longitudinal

end substantially transversely aligned with the proximal end of the main beam. The main beam, first leg, and second leg define a concavity accessible from a first transverse direction whereby the support bracket is transversely nestable. A connection element extends in a first transverse direction from the distal end of the main beam with a longitudinally extending tab transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam.

A **Second Embodiment** of the present claimed invention (claim 21) is directed to an eaves trough support bracket having a main beam, first leg and second leg. The first and second legs extend in a second transverse direction. The first leg has a transverse height that tapers in the second transverse direction with a height at the longitudinal center of the main beam less than one half the transverse height at the proximal longitudinal end of the first leg. The second leg has a transverse height that tapers in the second transverse direction with a height at the longitudinal center of the main beam less than one half the transverse height at the proximal longitudinal end of the second leg.

A **Third Embodiment** of the present claimed invention (claim 22) is directed to an eaves trough support bracket having a main beam, connection element, first leg, second leg, a first bend line, second bend line, at least one primary rib, and at least one secondary rib. The connection element includes a strut and a tab. The at least one primary rib is formed within the main beam and the strut which extends across and substantially perpendicular to the first bend line and overlaps the first and second leg improving the strength of the bracket. The at least one secondary rib is formed within the strut and tab and extends across and substantially perpendicular to the second bend line and transversely overlaps the at least one primary rib improving the strength of the bracket.

#### ISSUES

1. Whether claim 22 is indefinite for failing to show overlapping of the primary rib and the legs.

2. Whether claims 1, 3-16 and 18-22 are obvious over Ramser (United States Patent No. 3,053,491) in view of Schwartz (United States Patent No. 3,041,033) in further view of Odekirk (United States Patent No. 4,294,422).

#### GROUPING OF CLAIMS

1. Rejected claims 1, 3-16 and 18-22 do NOT stand or fall together with respect to the obviousness rejection over Ramser in view of Schwartz in further view of Odekirk. The First Embodiment of the Invention (claims 1, 3-16 and 18-20) is directed to nestable eaves trough support brackets having a connection element on the distal end of the main beam with a longitudinally extending tab transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam. The Second Embodiment of the Invention (claim 21) is directed to eaves trough support brackets having first and second legs with transverse heights that taper in the second transverse direction, with a transverse height of each leg at the longitudinal center of the main beam which is less than one half the transverse height of that leg at the proximal longitudinal end of the leg. The Third Embodiment of the Invention (claim 22) is directed to eaves trough support brackets having a primary rib which overlaps the legs.

#### ARGUMENT

##### *Objections/Rejections Under 35 U.S.C. § 112*

*1.0 The Examiner has objected to claim 22 as indefinite for failing to show overlapping of the primary rib and the legs.*

Applicant respectfully disagrees that claim 22 is indefinite. Claim 22 recites "at least one primary rib formed within the main beam and the strut which ... (ii) *longitudinally* overlaps the first leg and the second leg ..." (Emphasis Added). Figures 1-4 and 5 support this claimed element. Referring to Figure 2, the rib (131) clearly longitudinally overlaps the first leg (110) as the rib (131) has a longitudinal length that starts proximate the strut (40) and the distal longitudinal end (112) of the first leg (110) and runs in the second longitudinal direction ( $x^2$ )



toward the proximal longitudinal end (111) of the first leg (110). Hence, the rib longitudinally overlaps the first leg.

***Objections/Rejections***  
**Under 35 U.S.C. §103**

*2.0 The Examiner has rejected claims 1, 3-16 and 18-22 as obvious over Ramser (United States Patent No. 3,053,491) in view of Schwartz (United States Patent No. 3,041,033) in further view of Odekirk (United States Patent No. 4,294,422).*

**SUMMARY OF CITED REFERENCES**

**Ramser** discloses an eaves trough support bracket comprising a main beam, first leg, and second leg. The lower portions of the first and second legs are bent inward along a longitudinal bend line so as to form a nearly enclosed base on the bracket. The first and second legs also extend in the second transverse direction with the transverse height of the legs remaining substantially unchanged along the longitudinal length of the bracket.

**Schwartz** discloses a shelving bracket comprising a main beam, first leg, and second leg. The main beam, first leg, and second leg define a concavity accessible from a first transverse direction.

**Odekirk** discloses an eaves trough support bracket comprising a main beam, a first longitudinally elongated side rib, second longitudinally elongated side rib, and connection element. The connection element has a strut and tab. A rib is also disclosed along a bend line along the transition line from the main beam to the strut. The first and second side ribs extend in the second transverse direction with the transverse height of the side ribs remaining substantially unchanged along the longitudinal length of the bracket.

**LEGAL BASIS**

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation; either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to

combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, NOT in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). See, M.P.E.P. § 2143.

As to the first criteria, it is necessary to ascertain whether or not the reference motivates one of ordinary skill in the relevant art, having the reference before him, to make the proposed substitution, combination, or modification. In re Linter, 458 F.2d 1013, 173 U.S.P.Q. 560, 562 (CCPA 1972). Obviousness can only be established where there is some teaching, suggestion or motivation in the prior art or in the knowledge generally available to one of ordinary skill in the art, to combine the references and produce the claimed invention. In re Fine, 837 F.2d 1071, 5 U.S.P.Q. 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). See, M.P.E.P. § 2143.01.

#### FIRST EMBODIMENT

Ramser, Schwartz and Odekirk do NOT provide the requisite motivation to modify the eaves trough bracket of Ramser to have (i) an open base as disclosed in Schwartz, nor (ii) a connection element on the distal end of the main beam with a longitudinally extending tab transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam.

#### Open Base

While Schwartz discloses a bracket with an open base, the bracket is for shelving and the written description indicates the open base is used for positioning the bracket over wall studs. Neither Schwartz nor Odekirk disclose a bracket that is nestable. Persons skilled in the art would NOT normally look to shelving bracket technology to design an eaves trough gutter bracket. Due to the highly divergent uses of the Ramser invention relative to the Schwartz and Odekirk inventions,

persons skilled in the art would NOT be motivated to combine the teachings of these references. It is only through the use of forbidden hindsight that a motivation is found to combine these references.

Upwardly Spaced Connection Element Tab

The First Embodiment of the Present Claimed Invention is configured and arranged with a "return tab" on the connection element which is transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam. Such spacing of the return tab from the main beam positions the main beam a distance into the gutter effective for hiding the main beam from ground level view even when the gutter begins to sag. It is well known within the industry that the curbside appeal of a home is substantially diminished if the gutter brackets are visible from ground level. The First Embodiment of the Present Claimed Invention significantly reduces the likelihood that the brackets will become visible from ground level even if the gutter begins to sag.

Ramser discloses a gutter bracket with a connection element on the distal end of the bracket for engaging a lip [5] on the upper edge of the front wall of the gutter [4]. The connection element is a hook [11] with a longitudinally extending return portion which is transversely spaced from the main beam a distance barely sufficient to accommodate passage of the lip [5] on the gutter between the horizontal web [7] of the bracket and the return portion of the hook [11] (e.g., about 0.1 to 0.2 inches). See, FIG. 3. Ramser minimizes the transverse height of the gap formed by the hook [11] as the forward end of the bracket (i.e., the forward ends of the horizontal web [7] and the vertical sides [8]) must fit snugly against the front wall of the gutter [4] in order to prevent the bracket from damaging the gutter when the fastener [20] is driven into the rear wall of the gutter [1]. See, FIG 4. Accordingly, Ramser does not disclose, teach or suggest a connection element on the distal end of the main beam wherein the "return tab" is transversely spaced from the main beam a distance of about 0.4 to 0.6 inches from the first surface of the main beam.

Schwartz is not directed to a gutter bracket and therefore does not provide as "return tab".

Odekirk discloses a gutter bracket with a main beam having a portion which extends well above the "return tab" on the connection element.

#### SECOND EMBODIMENT

Ramser, Schwartz and Odekirk do NOT provide the requisite motivation to modify the eaves trough bracket of Ramser to have a first and second leg that have transverse heights that taper in the second transverse direction with a transverse height at the longitudinal center of the main beam of less than one half the transverse height at the proximal longitudinal end of the second leg. Odekirk discloses a gutter bracket with legs with a uniform transverse height along the entire length of the main beam. While Schwartz discloses a bracket with tapering legs, the bracket is for shelving and does not disclose a required ratio of the taper. Persons skilled in the art would NOT normally look to shelving bracket technology to design an eaves trough gutter bracket. Due to the highly divergent uses of the Ramser and Schwartz devices, persons skilled in the art would NOT be motivated to combine the teachings of these references. It is only through the use of forbidden hindsight that a motivation is found to combine these references.

#### THIRD EMBODIMENT

The Third Embodiment of the present claimed invention is directed to a bracket with a primary rib which overlaps the legs.

Ramser discloses an eaves trough support bracket comprising a main beam and a connection element. The Ramser bracket has no ribs. Accordingly, the Ramser bracket does not disclose, teach or suggest a primary rib which overlaps the legs.

Schwartz discloses a shelving bracket comprising a main beam and two legs. The Schwartz bracket has no ribs. Accordingly, the Schwartz bracket does not disclose, teach or suggest a primary rib which overlaps the legs.

Odekirk discloses an eaves trough support bracket. The Odekirk bracket comprises a main beam [20] and connection element [60]. The connection element [60] has a strut [62] and tab [64] with a rib [unnumbered] formed along the bend line [unnumbered] between the main beam [20] and the strut [62]. Odekirk does not disclose sides on the support bracket, but does disclose side ribs [22] which extend along the longitudinal length of the main beam [20]. However, as seen clearly in FIG 1, the rib [unnumbered] which extends across the bend line [unnumbered] does not longitudinally overlap the side ribs [22].

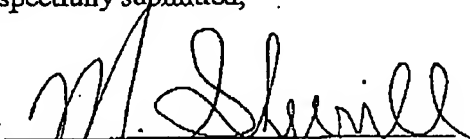
### CONCLUSION

Applicant respectfully submits that all pending claims (claims 1, 3-16 and 18-22) are in condition for allowance.

Respectfully submitted,

Date 12 Aug 04

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## APPENDIX

## PENDING CLAIMS

*United States Patent Application*  
*Serial No. 10/033,580*

1. An eaves trough support bracket, comprising:
  - (a) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces;
  - (b) a connection element extending in a first transverse direction from the distal end of the main beam and having a longitudinally extending tab transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam;
  - (c) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction;
  - (d) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam; and
  - (e) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam.
  - (f) wherein the main beam, first leg and second leg define a concavity accessible from the first transverse direction whereby the support bracket is transversely nestable.
3. The bracket of claim 1 comprising a laterally extending first bend line along a transition line from the main beam to the connection element.
4. The bracket of claim 3 further comprising at least one rib formed within the main beam and the connection element which extends across and substantially perpendicular to the first bend

line, whereby the longitudinal structural strength of the bracket along the first bend line is improved.

5. The bracket of claim 1 comprising a laterally extending second bend line along a transition line from the main beam to the hook.

6. The bracket of claim 5 further comprising at least one rib formed within the main beam and the hook which extends across and substantially perpendicular to the second bend line, whereby the longitudinal structural strength of the bracket along the second bend line is improved.

7. The bracket of claim 1 wherein the connection element includes (i) a strut with a first transverse end connected to the distal end of the main beam and a second transverse end extending in a first transverse direction from the distal end of the main beam, and (ii) the tab with a first longitudinal end connected to the second transverse end of the strut and a second transverse end extending in a second longitudinal direction from the second transverse end of the strut.

8. The bracket of claim 7 comprising a laterally extending third bend line along a transition line from the strut to the tab.

9. The bracket of claim 8 further comprising at least one rib formed within the strut and the tab which extends across and substantially perpendicular to the third bend line, whereby the longitudinal structural strength of the bracket along the third bend line is improved.

10. The bracket of claim 1 wherein the hook includes (i) a transversely extending shaft portion with a first end connected to the proximal end of the main beam and a second end extending in the first transverse direction from the proximal end of the main beam, (ii) a hooking portion with a first end connected to the second end of the shaft and a second end extending away from the distal end of the main beam in a second longitudinal direction from the second end of the shaft, and (iii) a transversely extending extension portion with a first end connected to the

second end of the hooking portion and a second end extending in the second transverse direction from the second end of the hooking portion.

11. The bracket of claim 1 further comprising a longitudinally extending fourth bend line along a transition line from the main beam to the first leg.
12. The bracket of claim 11 further comprising a longitudinally extending fifth bend line along a transition line from the main beam to the second leg.
13. The bracket of claim 10 further comprising a longitudinally aligned hole through each of the shaft and extension portions of the hook effective for accommodating partial passage of a mechanical fastener through the holes.
14. The bracket of claim 1 wherein the proximal longitudinal ends of the first and second legs independently have a transverse height of about 0.5 to 1.5 inches.
15. The bracket of claim 12 wherein (i) the fourth and fifth bend lines each have a distal longitudinal end proximate the distal end of the main beam, and (ii) at least one rib which extends across and is substantially perpendicular to the first bend line extends beyond the distal longitudinal ends of the fourth and fifth bend lines in the second transverse direction.
16. The bracket of claim 1 wherein the bracket is formed from a single unitary piece of metal.
18. An article of commerce, comprising:
  - (a) a length of eaves trough; and
  - (b) a plurality of eaves trough support brackets comprising:
    - (i) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces,
    - (ii) a connection element extending in a first transverse direction from the distal end of the main beam and having a longitudinally extending tab



- transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam,
- (iii) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction,
- (iv) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and
- (v) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam.
- (vi) wherein the main beam, first leg and second leg define a concavity accessible from the first transverse direction whereby the support bracket is transversely nestable.

19. A method of installing eaves trough, comprising the steps of:

- (a) obtaining a length of eaves trough defining a water diversion channel and comprising:
  - (i) a bottom having longitudinally spaced and laterally extending first and second edges,
  - (ii) a back wall transversely extending from the second laterally extending edge of the bottom and having a laterally extending distal edge transversely spaced from the bottom in a primary transverse direction,
  - (iii) a front wall transversely extending from the first laterally extending edge of the bottom and having a laterally extending distal edge transversely spaced from the bottom in the primary transverse direction, and
  - (iv) a laterally extending snap-lock channel formed along the distal edge of the front wall
- (b) obtaining a plurality of eaves trough support brackets comprising:

- (i) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces,
  - (ii) a connection element extending in a first transverse direction from the distal end of the main beam configured and arranged with a longitudinally extending tab transversely spaced from the main beam in the first transverse direction a distance of about 0.4 to 0.6 inches from the first surface of the main beam for releasable engagement within the snap-lock channel formed in the eaves trough,
  - (iii) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction,
  - (iv) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and
  - (v) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam,
  - (vi) wherein the main beam, first leg and second leg define a concavity accessible from the first transverse direction whereby the support bracket is transversely nestable;
- (c) engaging the connection element of the support bracket within the snap-lock channel formed in the eaves trough;
  - (d) sliding the distal edge of the rear wall of the eaves trough into the concavity defined by the hook to form a connected eaves trough assembly;
  - (e) positioning the connected eaves trough assembly along an eave with the back wall of the eaves trough engaging the eave; and
  - (f) securing the connected eaves trough assembly to the eave by longitudinally driving a mechanical fastener through the hook of the bracket and the rear wall of the eaves trough, and into connective engagement with the eave.

20. The method of claim 19 wherein the mechanical fastener passes through a hole in the hook and the hole is vertically positioned above the distal edge of the front wall of the eaves trough after installation of the eaves trough assembly such that water retained within the water diversion channel defined by the eaves trough will spill over the distal edge of the front wall of the eaves trough before contacting the hole in the hook.

21. An eaves trough support bracket, comprising:

- (a) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces;
- (b) a connection element extending in a first transverse direction from the distal end of the main beam;
- (c) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction;
- (d) a first leg (i) extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and (ii) having a transverse height that tapers in the second transverse direction with a transverse height at the longitudinal center of the main beam of less than one half the transverse height at the proximal longitudinal end of the first leg; and
- (e) a second leg (i) extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam, and (ii) having a transverse height that tapers in the second transverse direction with a transverse height at the longitudinal center of the main beam of less than one half the transverse height at the proximal longitudinal end of the second leg.

22. An eaves trough support bracket, comprising:

- (a) a main beam having longitudinally spaced distal and proximal ends, laterally spaced first and second edges, and transversely spaced first and second surfaces;

- (b) a connection element integrally formed with and extending in a first transverse direction from the distal end of the main beam wherein the connection element includes (i) a strut with a first transverse end connected to the distal end of the main beam and a second transverse end extending in a first transverse direction from the distal end of the main beam, and (ii) a tab with a first longitudinal end connected to the second transverse end of the strut and a second transverse end extending in a second longitudinal direction from the second transverse end of the strut;
- (c) a hook extending in the first transverse direction and a second longitudinal direction from the proximal end of the main beam, and defining a concavity open in a second transverse direction;
- (d) a first leg extending in a second transverse direction from the first edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam;
- (e) a second leg extending in the second transverse direction from the second edge of the main beam with a proximal longitudinal end substantially transversely aligned with the proximal end of the main beam;
- (f) a laterally extending first bend line along a transition line from the main beam to the strut;
- (g) at least one primary rib formed within the main beam and the strut which (i) extends across and substantially perpendicular to the first bend line, whereby the structural strength of the bracket along the first bend line is improved, and (ii) is latitudinally offset and longitudinally overlaps the first leg and the second leg, whereby the structural strength of the bracket along the first bend line is improved;
- (h) a laterally extending second bend line along a transition line from the strut to the tab; and
- (i) at least one secondary rib formed within the strut and the tab which (i) extends across and substantially perpendicular to the second bend line, whereby the structural strength of the bracket along the second bend line is improved, and (ii)

transversely overlaps the at least one primary rib whereby the strength of the bracket along the strut is improved.